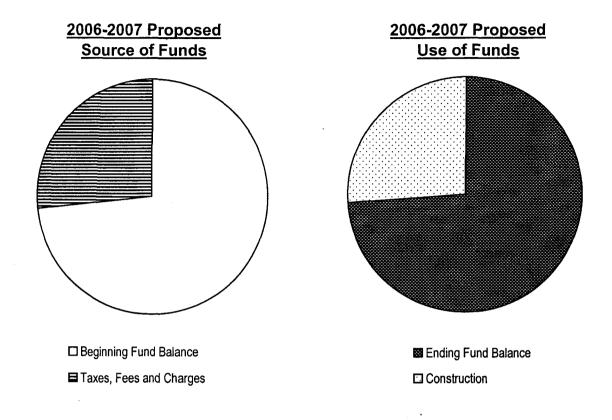
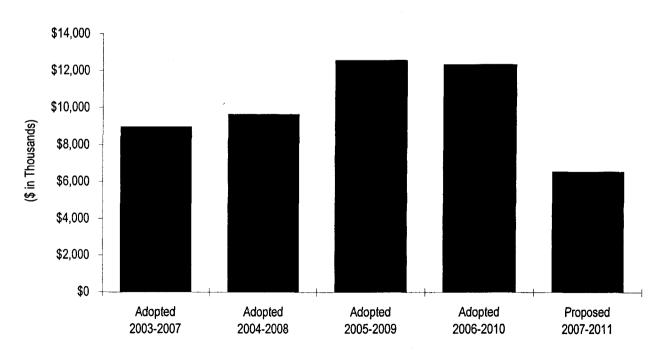
COMMUNICATIONS CAPITAL PROGRAM 2007-2011 Capital Improvement Program



CIP History



2007-2011 Proposed Capital Improvement Program

Overview

Introduction

In October 1990, the City assumed the responsibility of providing its own emergency communications service for police and fire from the County of Santa Clara. Communications Capital **Improvement** Program (CIP) was set up to address the replacement and upgrade of both the public safety and non-public safety radio equipment. The inventory of equipment that is supported by this program consists of approximately 25 fixed-equipment sites, 100 base stations, 980 mobile radios and 1,940 portable radios. The 2007-2011 Proposed CIP provides funding of \$6.6 million, of which \$3.4 million is allocated in 2006-2007.

This program is part of the Strategic Support City Service Area (CSA) and supports the following outcomes from that CSA: Safe and Functional Public Infrastructure, Facilities and Equipment; and Effective Use of State-of-the-Art Technology. In addition, the program supports one outcome in the Public Safety CSA: The Public Feels Safe Anywhere, Anytime in San José.

Program Priorities and Objectives

The Communications CIP's guiding objective is the provision of reliable, necessary public and non-public safety-related communications equipment for all City employees who need this equipment for their jobs.

Based on the CSA outcomes supported by this program, the following list of priorities has been developed:

 Proactively replace public safety-related communications equipment and systems to ensure reliability and optimal performance, and compliance with rules of the Federal Communications Commission;

- Maintain existing radio equipment in a proactive manner to ensure optimal functionality and to extend the length of service; and
- Strategically plan for future major upgrades and technology changes.

Almost the entire Communications CIP is allocated to equipment replacement and upgrades, which support each of the three priorities. This allocation provides funding to replace communications equipment over the next five years after careful study and planning. The life of the City's current equipment has been expanded as a result of a proactive maintenance schedule. The equipment, nevertheless, will eventually outlive its useful life and the costs of repairing outmoded equipment in some cases have begun to overtake the costs of replacing it.

The City of San José is the lead agency in a microwave radio network project, called "E-COMM", with 75% funding via the Oriented Community Policing Services Interoperable Communications (COPS) Federal Grant. A project manager has been assigned to review the final design and initiate an implementation strategy that will allow for the replacement of the City of San José's existing analog microwave network, and also allow direct connectivity to and from all other 9-1-1 dispatch centers within the County of Santa Clara Operational Area.

In 2007-2008, the replacement of over 400 radio modems and base stations that provide a wireless mobile data connectivity network for public safety vehicles is planned. Part of

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Overview

Program Priorities and Objectives (Cont'd.)

this process will be to identify potential cost effective alternatives that can continue to provide the same level of reliable mobile data services that are now offered, with an integration of additional wireless technology.

As economic factors continue to impact the General Fund, operation and maintenance support for police and fire systems will remain a top priority.

Sources of Funding

With the exception of the COPS Federal Grant, revenue for the 2007-2011 Proposed CIP is entirely from the Construction and Conveyance (C&C) Tax Fund. The Communications CIP receives 3.40% of the City's C&C Tax. Approximately 98% of this tax is derived from a transfer tax imposed upon each transfer of real property with the remaining 2% generated from a construction tax levied on most types of construction. For the 2007-2011 CIP, it is assumed that collections allocated to the Communications Capital Program will fall to \$918,000 in 2006-2007 (from the current year estimate of \$1,496,000) and will level off at \$782,000 annually for each of the remaining years of the CIP. The phenomenal strength of the local real estate market has driven growth in this category over the past several years. It is anticipated that the housing market will soften and C&C tax receipts will stabilize at a lower and more sustainable level over the next five years.

Program Highlights

<u>Communications Equipment Replacement & Upgrade</u>

As already highlighted, a majority of the Communications Capital Program budget is dedicated to equipment replacement and upgrade. These funds keep the City's communications sites, base stations, and approximately 6,700 mobile radios, portable radios, and mobile data systems functioning and up-to-date. The existing core radio equipment system and infrastructure was installed in 1990 and has an estimated 10-year life cycle for public safety equipment and 15vear life cycle for non-public equipment. Both public safety and nonpublic safety customers will benefit from this scheduled replacement.

Fire Dispatch Channel Expansion

The Fire Dispatch Channel Expansion project is currently evaluating the use of existing City frequencies to achieve the goal of converting the existing dispatch system from a Radio-to-Radio "simplex system" to a Radio-to-Dispatch-to-Radio "repeater system". This project will add an additional Command 2 channel for "on-scene" coordination.

Police Dispatch Voting Receivers

This five-year project, started in 2004-2005, will install 15 additional police voting receivers, and provide for upgrades to radio site equipment. A voting receiver is a device that receives voice transmissions and sends them to the 9-1-1 Center. By installing additional voting receivers, existing radio sites will begin to increase radio coverage across adjoining police and fire department districts

2007-2011 Proposed Capital Improvement Program

Overview

Program Highlights (Cont'd.)

as well as enhance communication reliability between deployed field units and dispatchers.

Major Changes from the 2006-2010 Adopted CIP

Major changes from the 2006-2010 Adopted CIP include the following:

9-1-1 Center Radio Dispatch Console Replacement & Upgrade

The replacement of the radio dispatch consoles in the City's 9-1-1 center was originally planned for 2000-2001. This replacement was deferred to 2006-2007 due to a condition assessment and the availability of replacement parts for the consoles currently in service. The vendor announced in 2004-2005 that they will no longer be able to support future upgrades and enhancements of the City's existing radio dispatch console hardware after December 31, 2006. Due to this announcement, the planned upgrade of the radio dispatch consoles in the City's 9-1-1

Center project was accelerated to 2005-2006. The overall cost of this upgrade is estimated at \$765,000 and is funded in the Communications Equipment Replacement and Upgrade appropriation.

Mobile Radio Replacement

A suitable replacement has been identified and purchased for mobile radios currently front-line support deployed in Fire Department vehicles. The mobile radio replacements within the fire station alerting system packages within each of the City's 34 Fire Stations will be purchased in 2006-2007. The overall cost of the equipment and installation is estimated at \$265,000 and will be funded in the Communications Equipment Replacement and Upgrade appropriation.

Operating Budget Impact

It is anticipated that there will be no additional operating and maintenance costs associated with projects included in the 2007-2011 Proposed CIP.

2007-2011 Proposed Capital Improvement Program Source of Funds

SOURCE OF FUNDS	Estimated 2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	5-Year Total
General Fund							
Contributions, Loans and Transfers from: General Fund							
 COPS 2003-2004 Interoperable Communications Grant Communications Equipment Replacement and Upgrade Interoperable Communications Radio Grant 	4,818,348						
Total General Fund	4,818,348				-		
Conveyance Tax Fund							
Beginning Fund Balance Taxes, Fees & Charges:	2,809,797	2,519,045	2,548,045	1,063,045	285,045	343,045	2,519,045
Construction and Conveyance Tax Reserve for Encumbrances	1,496,000 205,248	918,000	782,000	782,000	782,000	782,000	4,046,000
Total Communications Construction & Conveyance Tax Fund	4,511,045	3,437,045	3,330,045	1,845,045	1,067,045	1,125,045	6,565,045
TOTAL SOURCE OF FUNDS	9,329,393	3,437,045	3,330,045	1,845,045	1,067,045	1,125,045	6,565,045

^{*} The 2007-2008 through 2010-2011 Beginning Balances are excluded from the FIVE-YEAR TOTAL SOURCE OF FUNDS to avoid multiple counting of the same funds.

2007-2011 Proposed Capital Improvement Program

Use of Funds

HEE OF FUNDS	Estimated 2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	5-Year Total
USE OF FUNDS							
Construction Projects							
COPS 2003-2004 Interoperable Communications Grant	4,818,348						
Communications Equipment Replacement and Upgrade	1,940,000	393,000	2,082,000	1,375,000	723,000	434,000	5,007,000
Fire Dispatch Channel Expansion		70,000					70,000
Police Dispatch Voting Receivers		425,000	184,000	184,000			793,000
Total Construction Projects	6,758,348	888,000	2,266,000	1,559,000	723,000	434,000	5,870,000
Non-Construction							
General Non-Construction							
CIP Action Team	2,000						
Feasibility Study for Hidalgo Radio Site	50,000						
Total General Non-Construction	52,000						
Contributions, Loans and Transfe	ers to Special Fu	inds					
Transfer to City Hall Debt Service Fund		1,000	1,000	1,000	1,000	1,000	5,000
Total Contributions, Loans and Transfers to Special Funds		1,000	1,000	1,000	1,000	1,000	5,000
Total Non-Construction	52,000	1,000	1,000	1,000	1,000	1,000	5,000
Ending Fund Balance	2,519,045	2,548,045	1,063,045	285,045	343,045	690,045	690,045*
TOTAL USE OF FUNDS	9,329,393	3,437,045	3,330,045	1,845,045	1,067,045	1,125,045	6,565,045*

^{*} The 2006-2007 through 2009-2010 Ending Balances are excluded from the FIVE-YEAR TOTAL USE OF FUNDS to avoid multiple counting of same funds.

2007-2011 Proposed Capital Improvement Program **Detail of Capital Projects**

1. Communications Equipment Replacement and Upgrade

CSA:

Strategic Support

Initial Start Date:

Ongoing

CSA Outcome:

Effective Use of State-of-the-Art Technology

Revised Start Date:

Department:

General Services

Initial Completion Date:

Ongoing

Council District:

City-wide

Revised Completion Date:

Location:

City-wide

Description:

This allocation provides for the replacement of communications equipment based upon useful life expectancy. In 2006-2007, funding is programmed for the replacement of aging radio equipment at radio sites and upgrades to ancillary equipment at radio sites. Funding is allocated for the replacement of extensive fixed point (base station) radio equipment at 13 sites and replacement of over 400 radio modems and base stations that provide the radio data network for Public Safety vehicles in 2007-2008.

Justification:

This allocation funds essential communications equipment for Police, Fire, and non-public safety city

operations.

	EXPENDITURE SCHEDULE (000'S)										
Cost Elements	Prior Years	2005-06 Appn.	2005-06 Estimate	2006-07	2007-08	2008-09	2009-10	2010-11	5-Year Total	Beyond 5-Year	Project Total
Equipment		1,940	1,940	393	2,082	1,375	723	434	5,007		
TOTAL		1,940	1,940	393	2,082	1,375	723	434	5,007		
			FUN	IDING SO	URCE SC	HEDULE ((000'S)				
General Fund Communications Construction & Conveyance Tax Fund		1,940	1,940	393	2,082	1,375	723	434	5,007		
TOTAL		1,940	1,940	393	2,082	1,375	723	434	5,007		
			ANNUA	L OPERA	TING BUD	GET IMP	ACT (000'	S)			

None

Major Changes in Project Cost:

N/A

Project schedule dates and selected budget information are not provided due to the ongoing nature of this project.

FY Initiated:

Ongoing

Redevelopment Area:

N/A

Initial Project Budget:

SNI Area:

N/A

Appn. #:

4056

2007-2011 Proposed Capital Improvement Program Detail of Capital Projects

2. Fire Dispatch Channel Expansion

CSA:

Strategic Support

Initial Start Date: 3rd Qtr. 2003

CSA Outcome:

Effective Use of State-of-the-Art Technology

Revised Start Date:

Department:

General Services

Initial Completion Date: 2nd Qtr. 2004

Council District:

City-wide

Revised Completion Date: 2nd Qtr. 2006

Location:

City-wide

Revised Completion Date: 2nd Qtr. 2006

Description:

This project will move fire dispatch operations to a new radio frequency and enhance radio coverage

within the City.

Justification:

This project addresses radio interference to the City from fire agencies north of San Jose. Funding for this project utilizes funds from cancelled feasibility studies and a transfer from the Fire Construction and Conveyance Tax Fund in a prior fiscal year for the replacement and build out costs

of this project.

	EXPENDITURE SCHEDULE (000'S)										
Cost Elements	Prior Years		2005-06 Estimate	2006-07	2007-08	2008-09	2009-10	2010-11	5-Year Total	Beyond 5-Year	Project Total
Equipment		1 70		70					70		71
TOTAL	,	1 70		70					70		71
			FUN	IDING SO	URCE SC	HEDULE	(000'S)				
Communications Construction & Conveyance Tax Fund	•	1 70		70		- 13.11			70		71
TOTAL	•	1 70		70					70		71

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

2005-2009 CIP: The project costs have decreased to reflect the purchase of one rather than two radio frequencies based on the assumption that it is not likely that two frequencies will be located.

Notes:

FY Initiated:

2003-2004

Redevelopment Area:

N/A

Initial Project Budget:

\$113,000

SNI Area:

N/A

Appn. #:

4754

2007-2011 Proposed Capital Improvement Program Detail of Capital Projects

3. Police Dispatch Voting Receivers

CSA:

Strategic Support

Initial Start Date: 3rd Qtr. 2004

CSA Outcome:

Effective Use of State-of-the-Art Technology

Revised Start Date:

Department:

General Services

Initial Completion Date: 2nd Qtr. 2009

Council District:

City-wide

Revised Completion Date:

Location:

City-wide

Description:

This is a multi-year project to install additional police voting receivers (devices that receive voice

transmissions and send them to the 9-1-1 center) and upgrade signal conditioning devices at existing radio sites. This project will increase radio coverage across adjoining police districts.

Justification:

This project will improve public safety communications.

	EXPENDITURE SCHEDULE (000'S)										
Cost Elements	Prior Years	2005-06 Appn.	2005-06 Estimate	2006-07	2007-08	2008-09	2009-10	2010-11	5-Year Total	Beyond 5-Year	Project Total
Equipment	127	7 241		425	184	184			793		920
TOTAL	127	7 241		425	184	184			793		920
			FUN	IDING SO	URCE SC	HEDULE ((000'S)				
Communications Construction & Conveyance Tax Fund	127	7 241	•	425	184	184			793		920
TOTAL	127	241		425	184	184			793		920

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

None

Notes:

FY Initiated:

2004-2005

Redevelopment Area:

N/A

Initial Project Budget:

\$920,000

SNI Area:

N/A

Appn. #:

5887